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A new species of *Afroeme* from South Africa (Coleoptera: Cerambycidae: Xystrocerini)

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new species;
description;
South Africa.

Abstract. – The species *Afroeme kruegeri* **sp. nov.** (Cerambycinae, Xystrocerini) from South Africa is described, and compared to the other two species from this genus.

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Introduction

An undescribed *Afroeme* sp., from South Africa, was noticed among the unnamed Cerambycidae specimens during visits to the Ditsong National Museum of Natural History. Adlbauer (2004) initially placed the genus Afroeme in the Tribe Oemini, which was synonymized with Xystrocerini (Vitali & Rezbanyai-Reser, 2003; Bonneau & Vitali 2015). Below, we take the opportunity to describe this species.

Material and methods

Photographs were taken with a Canon EOS 5Ds mounted on a Zeiss Stemi 508 Microscope and stacked to enhance the depth of field, using Photoshop cc software. Measurements are in millimetres. Body length is the total length measured from the anterior margin of the clypeus to the apex of the elytra; body width is the maximum width between the elytral humeri.

The collection acronyms used in the text are as follows:

SANC: South African National Collection of Insects, ARC-PPRI, Pretoria, South Africa.

TMSA: Ditsong National Museum of Natural History (previously Transvaal Museum), Pretoria, South Africa.

Hand written “Type Labels” are attached to specimens of the newly described species. These are deposited in the TMSA or SANC collections, as indicated in text.

Results

CERAMBYCIDAE Latreille, 1802

CERAMBYCINAE Latreille, 1804

XYSTROCERINI Blanchard, 1845

Afroeme Adlbauer, 2004

Afroeme kruegeri **sp. nov.**

(Fig. 1a, b)

ZooBank: http://zoobank.org/571B5738-017E-4BE1-96F0-634125EC5092

Holotype, ♂, SOUTH AFRICA: Eastern Cape Province, Graaff-Reinet Dist., 32°17'S 25°17'E, 6-14XI.2012, *Leg.* Martin Krüger (TMSA) (Fig. 1a).

Paratypes:

- 1♀, same data as holotype (TMSA) (Fig. 1b);
- 1♀, South Africa: Mpumalanga, Presidentsrus, 25°45'33"S 29°19'05"E, 9.X.2016, Light Trap, *Leg.* M.D. & J.M. Bate (SANC).

Description.

Habitus elongate and slender, dorsoventrally flattened.

Measurements. – ♂ length 11,5 mm , width 2,2 mm; ♀ length 12,5 - 11,4 mm, width 2,4 mm.

Colouration. – The eyes and mandibles black; ♂ with head, scape, pedicel and antennomeres 3–6, pronotum, and legs dark brown; remainder of the antennal segments, elytra and ventral aspect reddish-brown; in the ♀ only the head, scape, pedicel and antennomere 3 dark brown remainder reddish-brown.

Integument. – Entire body sparsely covered with short appressed pale-yellow setae. Antennae ventrally fringed with a row of semi-erect short pale-yellow setae, in ♂ this ventral fringe occurs on antennomeres 3–6, whilst antennomeres 7–11

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have a mico-tomentum and a few sparse bristles apically; in ♀ the ventral fringe only occurs on antennomere 3. Ventral aspect of habitus with short, sparse and appressed setae, and a few longer lateral setae on apical sternites.

Head. – Mandibles short, shiny and arcuate. Frons is transverse and rugosely punctate. A fine longitudinal depression extends from the clypeus to the posterior margin of the vertex. Antennal tubercles strongly developed and separated by a deep V-shaped groove. Eyes coarsely granulate; the ventral ocular lobe large, as long as wide, connected to the dorsal ocular lobe by three rows of ommatidia ; dorsal ocular lobes small and widely separated, not extending past the antennal insertion points medially. Vertex slightly convex and parallel sided, with a fine rugose punctation.

Antennae. – Slender, filiform, and 11 segmented. In the ♂ extending beyond the apex of the elytra by the apical three and a half antennomeres, in ♀ by the last two apical antennomeres. Antennomeres 3 and 4 are sub-equal in length and longer than scape in the ♂, in ♀ antennomere 3 is longer than 4, antennomeres 5–11 decreasing in length in both sexes. Scape elongate, glossy and rugosely punctate, extending past base of the head by half of its length in ♂, or a third of its length in ♀. Pedicel as long as wide, glossy and rugosely punctate. In ♂, antennomeres 3–5 are rugosely punctate and asperate ventrally (generic character), thereafter antennomeres 6–11 have a micro-sculpture. In ♀ only antennomere 3 is rugosely punctate, antennomeres 4–11 with a micro-sculpture.

Pronotum. – Longer than wide in ♂, as long as wide in ♀, with a deep basal constriction giving rise to a distinct neck, and a shallow apical constriction. Apical margin wider than the basal margin (generic character); basal margin slightly convex medially, apical margin straight. Pronotum strongly expanded laterally in the basal third from where it gradually decreases in width towards apex. Pronotal disc is irregularly flattened, with a shallow longitudinal medial depression extending from the basal third to the apical constriction (less distinct in ♀), and two slightly elevated longitudinal areas; one on each side of the depression. Dorsal surface micro-sculptured, with small very finely rugosely punctured areas on the longitudinal elevations. A few transverse wrinkles visible adjacent to basal margin.

Scutellum. – Small, parallel-sided and broadly rounded apically, with dorsal micro-sculpture.

Elytra. – Elongate, approximately four times longer than the length of pronotum. Elytra together at the humeri wider than maximum width of pronotum. Humeral angles rounded and moderately elevated; the lateral elytral margins tapering gradually towards the apex in ♂, or parallel-sided in the basal half for ♀. Elytral apices each narrowly rounded. Each elytron with two slightly raised carinae extending from basal third but disappearing towards apical third. The dorsal surface is glossy, finely and rugosely punctured on basal half, with micro-sculpture on the apical third.

Legs. – Femora laterally compressed with micro-sculpture; distinctly broader in ♂ than ♀. Tibiae long, slender, finely and rugosely punctured. Metatarsi long, first tarsomere twice as long as the following two combined in ♂.

Ventral aspect. – Surface glossy; coxae conical, with anterior coxal cavities angulate laterally and open posteriorly. Prosternal process narrow, approximately half the pro-coxal width. Mesocoxal cavities open to epimera, and mesosternal process small, narrow, and obliquely inclined. Visible ventrites becoming shorter in length towards the abdominal apex.

Distribution. – South Africa: KwaZulu-Natal, Mpumalanga.

Differential diagnosis. – Adlbauer (2019) indicated that the 'lack of transverse wrinkles on the apex of the scape' as well as a 'concave indentation in the middle or basal region of the pronotum' differentiates the representatives of *Afroeme* Adlbauer, 2004 from the representatives of the closely related genus *Catoeme* Aurivillius, 1908.

Afroeme kruegeri **sp. n.** has no clear transverse wrinkles on the apex of the scape; the apical pronotal margin is wider than the basal margin; there is a shallow longitudinal medial depression on the pronotal disc in ♂; and the femora are laterally compressed. All these characters conform to the genus *Afroeme*.

The new species clearly differs from the two other known species in the genus: from *A. kenyensis* Adlbauer, 2004 it differs by its colouration, as well as the presence of transverse wrinkles on the basal constriction of the pronotum, and finer punctation on the elytra; whereas it differs from *A. fusca* (Gahan, 1900) by having a distinct basal 'neck' and a straight apical edge to the pronotum, and a southern African distribution.

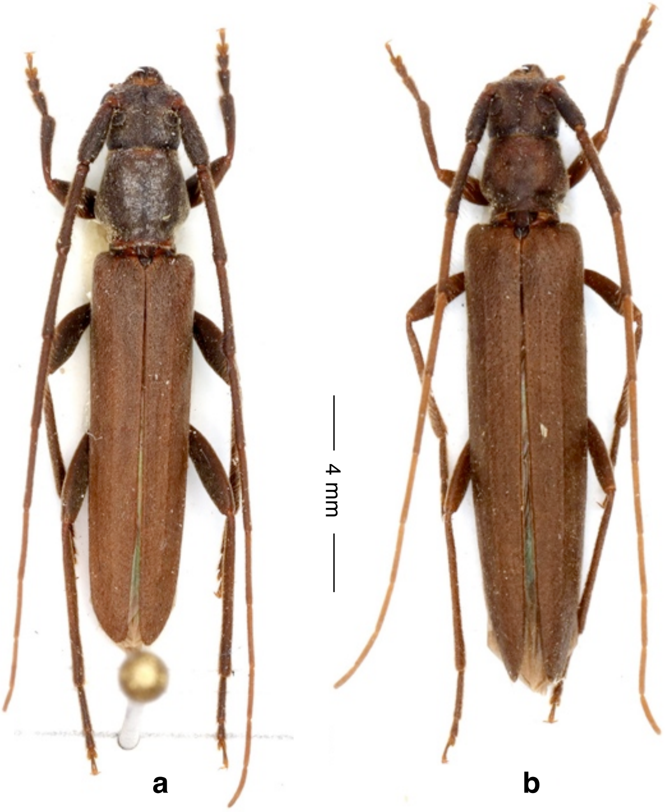

Figure 1. *Afroeme kruegeri* **sp. nov**.

a. Holotype, ♂, dorsal habitus, length 11,5 mm.
b. Paratype, ♀, dorsal habitus, length 12,5 mm.

The habitus of *A. kruegeri* **sp. n.** is superficially similar to *Capoeme parallela* Adlbauer, 2008, but this species can be easily differentiated by having:

- A shallow median longitudinal depression on the pronotum (absent in *C. parallela*);
- A distinct basal 'neck' of the pronotum (pronotum ovate in *C. parallela*);
- Short pale-yellow pubescence (longer and white in *C. parallela*);
- Different surface sculpturing; and first tarsomere of hind tarsi in ♂ twice as long as the following two tarsomeres combined (in *C. parallela* first tarsomere of hind tarsi only slightly longer).

Etymology. – The new species is named after the late Dr. Martin Krüger (1964–2019), who collected both the male and female specimens. Dr. Martin Krüger was an eminent entomologist and a former acting Director, as well as the Senior Curator, Entomological Collection (Lepidoptera), of the Ditsong National Museum of Natural History (Pretoria).

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Résumé

Bate R. & Bate M. D., 2023. – Une nouvelle espèce du genre *Afroeme* d’Afrique du Sud (Coleoptera: Cerambycidae: Xystrocerini). *Faunitaxys*, 11(18): 1 – 3.

L'espèce *Afroeme kruegeri* **sp. nov.** (Cerambycinae, Xystrocerini) d'Afrique du Sud est décrite et comparée aux autres espèces du genre.

Mots-clés. – Coleoptera, Cerambycidae, Cerambycinae, Xystrocerini, *Afroeme*, *kruegeri*, longicorne, taxonomie, nouvelle espèce, description, Afrique du Sud.

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Illustration de la couverture :

Protea cynaroides (Protée royale) est une plante de la famille des *Proteaceae*. C'est la plante nationale de l'Afrique du Sud. Elle pousse dans la Province du Cap-Occidental.

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